AMENDMENTS TO THE DRAWINGS:

Figure 1 has been marked to show subprocesses 1 and 2 as SP1 and SP2. The second interface algorithm in the second interface rule IA-2 and IR-2 were omitted from original Figure 1. These are shown as co-located with IA-1 and IR-1 in amended Figure 1. In Figure 2, reference numeral 58 has been added and reference numeral 59 has been moved.

New Figures 3 and 4 are added. These new Figures are based on the disclosure (including the claims and drawings) as originally filed and thus no new matter is added.

REMARKS

Reconsideration and allowance of the subject patent application are respectfully requested.

With respect to the objection to the drawings as allegedly failing to show every feature specified in the claims as set forth in item 3 of the office action, Applicant submits herewith new Figures 3 and 4. These new Figures are based on the disclosure (including the claims and drawings) as originally filed and thus no new matter is added. With respect to Figure 3, Figure 1; original claims 1-16; and the detailed description at, for example, pages 7-11 provide a basis for the elements shown in Figure 3. With respect to Figure 4, the steps shown therein are described, for example, at pages 6-11 of the detailed description. The specification has been amended to reflect the addition of new Figures 3 and 4.

With respect to the objection to the drawings as allegedly failing to include certain reference sign(s) mentioned in the description as set forth in item 4 of the office action, the specification at page 12, line 27 has been amended to refer to "the second subprocess (SP2)" and Figure 1 has been marked to show subprocesses 1 and 2 as SP1 and SP2. The second interface algorithm in the second interface rule IA-2 and IR-2 were omitted from original Figure 1. These are shown as co-located with IA-1 and IR-1 in amended Figure 1. In Figure 2, reference numeral 58 has been added and reference numeral 59 has been moved. Finally, reference numeral 1 mentioned on page 22, line 36 has been changed to SP1.

The specification and abstract have been amended to address the minor informalities noted in item 5 of the office action.

Claims 1 and 17 have been amended to address the minor informalities noted in item 6 of the office action.

Applicants traverse the Section 112, first paragraph, rejection of claims 7 and 22 as failing to comply with the enablement requirement as set forth in item 7 of the office action. The specification clearly describes at pages 22-23 that rules engine 1 may monitor IA-1 (e.g., algorithms which may specify a relationship – see page 11, line 18 et seq.) and substitute IA-2 for IA-1 if certain predetermined conditions are met. The specification describes and fully

enables a conditional rule for selecting among relationships as specified in claims 7 and 22 and withdrawal of the Section 112, first paragraph, rejection of these claims is respectfully requested.

With respect to the rejection of claims 1-26 under 35 U.S.C. Section 112, second paragraph, set forth in item 10 of the office action, Applicants have removed the word "internal" from claim 1, and the wording of the final paragraph has been re-ordered to address the other antecedent objections. With respect to claim 3, this claim has been amended to depend from claim 2. The amendments to claim 17 follow those made to claim 1.

With respect to the comments regarding the terms "passive" and "variable", some discussion of the portions of the specification to which the office action refers may assist in providing an understanding of this terminology.

Page 9, line 20 et seq. discusses a variable which has been designated as dependant in an interface relationship. It is passive in the sense that its domain is determined by changes in interface variables from other sub-process which are involved in this relationship. The domains of the other variables in the relationship are actively being changed either by users of a sub-process or algorithms within a sub-process, hence the term active variable. This may lead to the domain of the passive variable having a set of values or single value in the case of an integer variable. When an optimisation algorithm is activated the value of the passive variable will be set to give an optimum outcome.

Page 12, line 26 et seq. discusses a passive, dependent variable associated with a process. It specifically discusses the point that a passive variable of a process cannot be changed by an algorithm or rule associated with that process. This does not mean that (as in Page 9, line 20) its domain cannot be determined by other variables in another sub-process.

The significant point here is the "silo" context of design sub-process and the ability/requirement to control the degree to which a design sub-process outcome can be determined by other variables from other sub-processes.

Applicants respectfully submit that the terms "active" and "passive" variables are not indefinite and reconsideration of the Section 112, second paragraph, rejection on this basis is respectfully requested.

With respect to the Section 101 issues set forth in items 11-13, Applicant disagrees with the assertions that the claims are directed to non-statutory subject matter. Nonetheless, to

advance prosecution, claim 1 has been amended to refer to a "computerized" system and as such is believed to clearly described statutory subject matter. Claim 16 has been amended to include a "storing" feature and this is believed constitute a "tangible" result. Based on these amendments, withdrawal of the Section 101 rejection is respectfully requested.

Claims 1-26 were rejected under 35 U.S.C. Section 102(e) as allegedly being "anticipated" by Farrah et al. (U.S. Patent No. 6,882,892). The claims were also rejected under 35 U.S.C. Section 102(b) as allegedly being "anticipated" by WO/2001/54004 (which the office action describes as the PCT counterpart to Farrah et al.). Applicants traverse these rejections as applied to the original and amended claims.

The office action notes that for purposes of examination, "active" and "passive" variables have been interpreted to mean "independent" and "dependent" variable, respectively. Applicants traverse this contention. The terms "active" and "passive" cannot directly be equated to "independent" and "dependent". The terms active and passive define the ability to modify the relationship whereas, the terms dependent and independent define whether or not the variable is dependent on other variables.

Claims 1 and 16 each describes specifying which variables are active variables which can have their domains modified by at least one internal process within the sub-process to which the variable belongs and which variables are passive variables which have their domains determined within allowable values by the domains of the other variable or variables. Applicants submit that this feature is not disclosed or suggested by the applied reference.

With respect to the comments in the office action at the end of item 17, the specifying of which variables are active and passive has been positively recited in claim 1. Moreover, the comments in the office action regarding the types of variables that are mentioned in column 7 of the specification of Farrah et al. are noted. However, at the time of the Farrah et al. patent, the inventor of the present application (who is also a named inventor of Farrah et al.) had not formed the concept of active and passive variables which were first introduced into this application as a means to provide a specific control process for the system described in the Farrah et al. patent. Applicants respectfully submit that the claim limitation of specifying passive and active variables is not disclosed in Farrah et al. because, among other things, there is no specific means disclosed

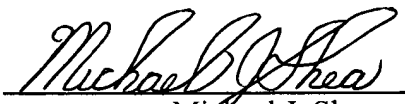
in Farrah et al. for specifying them as passive or active as those terms are expressly described in claims 1 and 17 and the claims that depend therefrom.

New claim 27 is for a computer-readable medium and is believed to patentably distinguish over Farrah et al. for the reasons discussed above with respect to claims 1 and 17.

The pending claims are believed to be allowable and favorable office action is respectfully requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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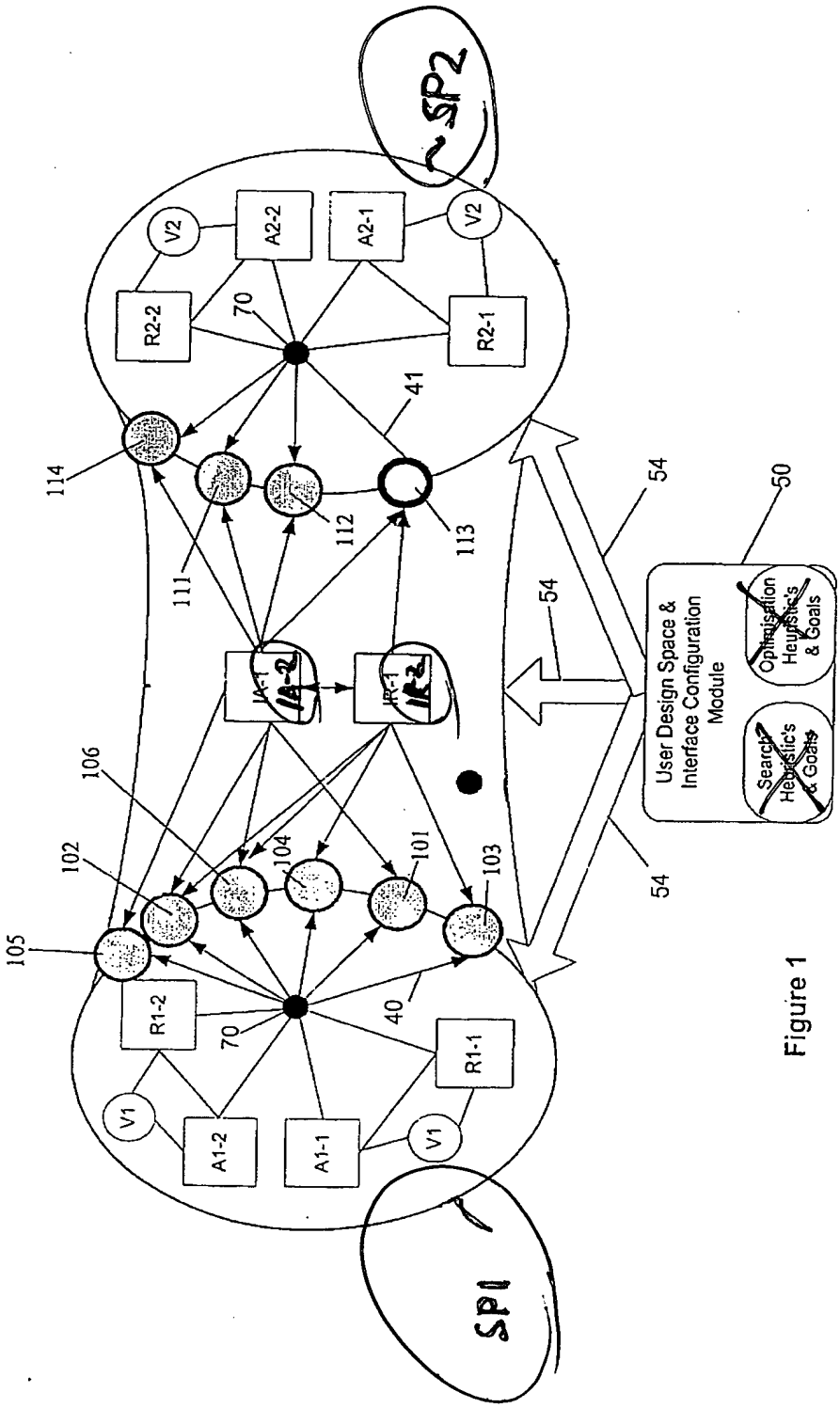

Figure 1

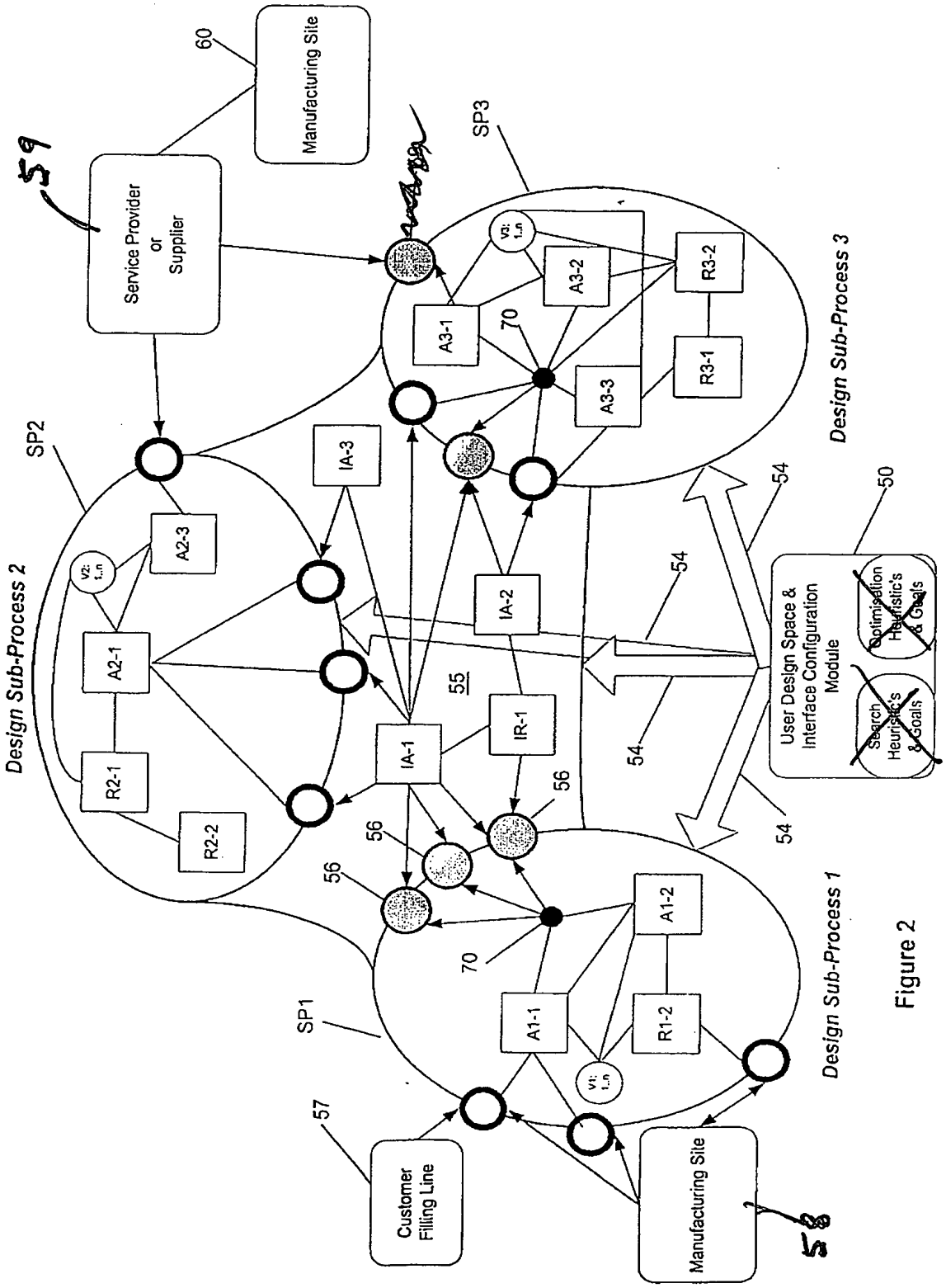
59
60
Manufacturing Site
Service Provider or Supplier
SP3
SP2
SP1
Design Sub-Process 2
Design Sub-Process 3
Design Sub-Process 1
A3-1
A3-2
A3-3
R3-1
R3-2
IA-3
IA-2
IA-1
IR-1
A2-1
A2-2
A2-3
R2-1
R2-2
A1-1
A1-2
R1-1
R1-2
V1: 1..n
V2: 1..n
V3: 1..n
70
55
54
56
50
User Design Space & Interface Configuration Module
Optimisation Heuristic's & Goals
Search Heuristic's & Goals
57
Customer Filling Line
Manufacturing Site
58

Figure 2